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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,323	09/30/2003	Ulf Bodin	NET-6239	3892

25962 7590 03/16/2010

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EXAMINER	
IBRAHIM, MOHAMED	
ART UNIT	PAPER NUMBER
2444	

MAIL DATE	DELIVERY MODE
03/16/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/673,323	BODIN ET AL.	
	Examiner	Art Unit	
	MOHAMED IBRAHIM	2444	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 November 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5-17 and 31-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5-17 and 31-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

1. This action is in response to the communications and remarks filed on 19 November 2009.

Claims 1, 5-17 and 31-40 are presently pending for examination.

Response to Arguments

2. Applicant's arguments filed 11/19/2009 have been fully considered but they are not persuasive.

Applicant, in substance, argues that the combined references fails to teach "calculating a measurement level, the measurement level being a rate lower than the threshold," "repeatedly measuring, during usage, multiplexing properties of the aggregated ADFs on each link, wherein the measuring begins when a reservation level exceeds the measurement level," and "recalculating the measurement level based on the dynamically adapted threshold."

In response to Applicant's argument, applicant is reminded the applied prior art of record are utilized as an obvious type rejection and not as an anticipation rejection. With regard to calculating a measurement level, the measurement level being a rate lower than the threshold, Davis discloses admission control mechanism wherein measurement level is calculated comparing with a local threshold value wherein this measurement occurs at a rate lower than the threshold (see Davies, fig. 5 item 78 and col. 11 lines 33-45). Furthermore, Davies discloses by repeating this process of measuring admission control when the threshold value is greater or equal to the

maximum configured bandwidth and increasing the local threshold depending on the calculated measurement level (see Davies, col. 11 lines 46-58). Similarly Krishnan teaches measuring level determination for reservation level purposes (see Krishnan, col. 6 lines 19-42).Therefore, Davies indeed discloses repeatedly measuring, during usage, multiplexing properties of the aggregated ADFs on each link, wherein the measuring begins when a reservation level exceeds the measurement level and thus dynamically adapting threshold. Thus the combined references still meet the required scope of the claimed limitations as currently presented.

Again, it is the Examiner's position that Applicant has not yet submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art. Thus it is advised that, in order to further expedite the prosecution of the application in response to this action, Applicant should amend the base claims to describe in more narrow detail the true distinguishing features of Applicant's claim invention.

Applicant has had an opportunity to amend the claimed subject matter, and has failed to modify the claim language to distinguish over the prior art of record by clarifying or substantially narrowing the claim language. Thus, Applicant apparently intends that a broad interpretation be given to the claims and the Examiner has adopted such in the present and previous Office action rejections. See In re Prater and Wei, 162 USPQ 541 (CCPA 1969), and MPEP 2111.

Claim Rejections – 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 5-17 and 31-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies et al. (Davies), U. S. Patent No. 6839767 in view of Krishnan et al. (Krishnan), U. S. Patent No. 6366559 and further in view of Kirkby, U. S. Patent No. 6888842.

Regarding claim 1, Davies discloses a method for performing admission control in order to offer assurances on forwarding quality in networks comprising the steps of: setting a threshold for each link where said threshold defines a maximum sum of forwarding resources requested by applications for their application data flows, ADFs, on the link (see e.g. fig. 5, col. 5 lines 3-37 and col.10 line 56-col. 11 line 3; a system for assuring admission control quality that utilizes threshold is provided); calculating a measurement level, the measurement level being a rate lower than the threshold (see Davies, fig. 5 item 78 and col. 11 lines 33-45; calculation of measurement level is computed at rate lower than the threshold) repeatedly measuring, during usage, multiplexing properties of the aggregated ADFs on each link, wherein the measuring exceeds measurement level (see e.g. fig. 5 and col. 11 line 53-col. 12 line 6; user periodically measure the bandwidth usage); dynamically adapting the level of said threshold by utilizing the measured multiplexing properties of the ADFs on each link and by utilizing knowledge

about the forwarding resources of the links (see e.g. col. 9 lines 23-32 and col. 10 lines 7-27; admission controller makes decision on whether or not to forward message from a sender via the link which depend of the bandwidth and flow of data) .

Although Davies discloses the invention substantially as claimed, it does not explicitly disclose controlling admission to each link based on the threshold.

Krishnan teaches a system for traffic admission control and routing in a communication network that multiplexes different traffics onto a link. The system determines admission costs for each link based on the cost threshold (see e.g. figs.4, 5 and col. 5 lines 15-32 and col. 6 lines 19-42). At the time of the invention it would have been obvious to a person of ordinary skills in the art to combine the teachings of Krishnan with that of Davies. Motivation for doing so would have been to achieve multiplexing efficiency by utilizing traffic admission control techniques (see Krishnan col. 2 lines 3-16).

Although the combined references disclose the invention substantially as claimed, they do not explicitly disclose that the measuring admission control based on reservation level.

Kirkby teaches dynamic resource control system wherein a resource calculator is utilized to determine admission control based on the reservation level that is less the maximum (see Kirkby, fig. 1 item 152, col. 2 lines 7-14, col. 3 lines 34-49 and col. 4 lines 6-26). At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kirkby with that of Davies-Krishnan. Motivation for doing so would have been to ensure the efficient operation of the network by meeting the user demands for the available resources (see Kirkby, col. 1 lines 17-

19).

Regarding claim 5, Davies-Krishnan-Kirkby teaches setting an initial threshold for each link (see e.g. Davies, col. 12 line 51-col. 13 line 4).

Regarding claim 6, Davies-Krishnan-Kirkby teaches choosing the initial threshold estimating multiplexing properties of different ADFs off-line, said estimation being based on results from preparatory tests of recorded samples of ADFs, which are expected on a link and use this estimation when choosing the level of said threshold (see Davies, col. 7 lines 30-38).

Regarding claim 7, Davies-Krishnan-Kirkby teaches performing the measurements at least two different rates (see Davies, col. 8 lines 34-59).

Regarding claim 8, Davies-Krishnan-Kirkby teaches measuring at a first rate, which is equal to or lower than the amount of allocated resources on the link and measuring at a second rate, which is lower than the first rate (see Davies, col. 11 lines 22-32).

Regarding claim 9, Davies-Krishnan-Kirkby teaches wherein the second rate is dependent on the reserved resources on the link and the threshold (see Davies, col. 8 lines 34-58).

Regarding claim 10, Davies-Krishnan-Kirkby teaches increasing the threshold when both the measurement at the first and second rates indicate lower loss-rates than what is assured (see e.g. col. 11 lines 33-58); decreasing the threshold when both the measurement at the first and second rates indicate higher loss-rates than what is assured; and maintaining the threshold when the measurement at the second rate indicates higher loss-rate than assured and the measurement at the first rate indicates lower loss-rate than assured (see Davies, col. 12 lines 19-37).

Regarding claim 11, Davies-Krishnan-Kirkby teaches introducing a measurement threshold, which defines a level of forwarding capacity reservations on the link above which the measurements are initiated (see Davies, col. 11 lines 4-21).

Regarding claim 12, Davies-Krishnan-Kirkby teaches increasing the measurement threshold in steps but not over a predefined maximum level which is lower than the level of allocated resources of the link when the measurement at the second rate indicates higher loss-rate than assured and the measurement at the first rate indicates lower loss-rate than assured (see Davies, col. 11 lines 34-58).

Regarding claim 13, Davies-Krishnan-Kirkby teaches measuring at a third rate, which is higher than the first rate but equal to or lower than the allocated resources of the link when the measurement at the first rate indicates a higher loss rate than assured, the loss rate measured at the third rate being indicative of if it is necessary to pre-empt

ADFs from the link or if it is enough to prevent new ADFs from entering the link (see Davies, col. 11 lines 33-58 and col. 12 line 51-col. 13 line 4).

Regarding claim 14, the limitations of this claim is substantially the same as that of claim 1 and thus is rejected for the same rationale in the rejection of claim 1.

Regarding claim 15, Davies-Krishnan-Kirkby teaches characterized in that it comprises or is connectable to a measuring means adapted to perform measurements on the links (see Davies, col. 12 lines 7-18).

Regarding claims 16-17, the limitations of these claims have already been addressed (see claim 1 above).

Claim 31 list all the same elements of claim 1, but in device form rather than method form. Therefore, the supporting rationale of the rejection to claim 1 applies equally as well to claim 31.

Regarding claim 32, the limitations of these claims have already been addressed (see claim 5 above).

Regarding claim 33, the limitations of these claims have already been addressed (see claim 6 above).

Regarding claim 34, the limitations of these claims have already been addressed (see claim 7 above).

Regarding claim 35, the limitations of these claims have already been addressed (see claim 8 above).

Regarding claim 36, the limitations of these claims have already been addressed (see claim 9 above).

Regarding claim 37, the limitations of these claims have already been addressed (see claim 10 above).

Regarding claim 38, the limitations of these claims have already been addressed (see claim 11 above).

Regarding claim 39, the limitations of these claims have already been addressed (see claim 12 above).

Regarding claim 40, the limitations of these claims have already been addressed (see claim 13 above).

Prior Art of Record

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form PTO-892 (Notice of Reference Cited) for a list of relevant prior art.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMED IBRAHIM whose telephone number is (571)270-1132. The examiner can normally be reached on Monday through Friday from 7:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn, Jr. can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. I./
Examiner, Art Unit 2444
/William C. Vaughn, Jr./
Supervisory Patent Examiner, Art Unit 2444